(b) When persons are transported by a hoist, a second person familiar with and qualified to stop the hoist shall be in attendance, except where the hoist is fully equipped with overspeed, overwind, and automatic stop devices.

## §77.1906 Hoists; daily inspection.

- (a) Hoists used to transport persons shall be inspected daily. The inspection shall include examination of the headgear (headframe, sheave wheels, etc.), connections, links and chains, and other facilities.
- (b) Prior to each working shift, and before a hoist is returned to service after it has been out of normal service for any reason, the hoist shall be run by the hoist operator through one complete cycle of operation before any person is permitted to be transported.
- (c) At the completion of each daily examination required by paragraph (a) of this section, the person making the examination shall certify, by signature and date, that the examination has been made. If any unsafe condition in the hoisting equipment is present, the person conducting the examination shall make a record of the condition and the date. Certifications and records shall be retained for one year.

(Sec. 101, Federal Mine Safety and Health Act of 1977, Pub. L. 91-173 as amended by Pub. L. 95-164, 91 Stat. 1291 (30 U.S.C. 811))

[48 FR 53242, Nov. 25, 1983, as amended at 60 FR 33723, June 29, 1995]

## §77.1907 Hoist construction; general.

If hooks are used to attach cages or buckets to the socket or thimble of a hoisting rope, the hooks shall be selfclosing.

(Sec. 101, Federal Mine Safety and Health Act of 1977, Pub. L. 91–173 as amended by Pub. L. 95–164, 91 Stat. 1291 (30 U.S.C. 811))

[48 FR 53242, Nov. 25, 1983]

## §77.1908 Hoist installations; use.

(a) Where men are transported by means of a hoist and the depth of the shaft exceeds 50 feet, the hoist rope shall be suspended from a substantial hoisting installation which shall be high enough to provide working clearance between the bottom of the sheave and the top of the cage or bucket.

- (b) Where men are transported by means of a hoist and the depth of the shaft exceeds 100 feet, temporary shaft guides and guide attachments, or other no less effective means, shall be installed to prevent the cage, platform, or bucket from swinging.
- (c) All guides and guide attachments, or other no less effective means, installed in accordance with paragraph (b) of this section shall be maintained to a depth of not less than 75 feet from the bottom of the shaft.
- (d) Where crossheads are used, the cage, platform, or bucket shall not be hung more than 10 feet below the crosshead.
- (e) Where men are required to embark or disembark from a cage, platform or bucket suspended over or within a shaft, a loading platform shall be installed to insure safe footing.
- (f) During the development of each slope or shaft, either a ladder or independently powered auxiliary hoist shall be provided to permit men to escape quickly in the event of an emergency.
- (g) No person shall be permitted to ride the rim of any bucket or on the top of a loaded bucket.
- (h) The number of persons permitted to ride in cages, skips, or buckets shall be limited so as to prevent overcrowding.
- (i) Persons shall not be permitted to ride on a cage, skip, or bucket with tools or materials, except when necessary to handle equipment while in transit. Materials shall be secured to prevent shifting while being hoisted.
- (j) The speed of buckets transporting persons shall not exceed 500 feet per minute and not more than 200 feet per minute when within 100 feet of any stop.
- (k) A notice of established speeds shall be posted in clear view of the hoistman.
- (l) Conveyances being lowered in a shaft in which men are working shall be stopped at least 15 feet above such men and shall be lowered further only after the hoistman has received a signal that all men who may be endangered by the conveyance are in the clear.
- (m) No skip or bucket shall be raised or lowered in a slope or shaft until it has been trimmed to prevent material